

ABSTRACT OF THE DISCLOSURE

A screening assay for identifying modulators of chondrogenesis is described. The assay comprises providing cells capable of differentiating into chondroblasts; transfecting the cells with a nucleic acid construct comprising a reporter gene that is detectable upon chondroblast differentiation; adding a test compound to the transfected cells; and determining the effect of the test compound on chondroblast differentiation. The reporter gene is preferably responsive to the transcription factor Sox9. The modulators may be useful as therapeutic agents that can inhibit or enhance cartilage formation. The assay may also be used to diagnose, monitor or prognose diseases associated with abnormal cartilage formation.